

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow, are respectfully requested.

Claims 1 and 16 have been amended to specify that at least two kinds of infrared absorbing agents are present in the toner of the invention. Support for this amendment may be found in the specification on page 10, paragraphs [0025] and [0026] and page 21, paragraph [0066]. Claims 1, 2, 4 and 16 were also amended for clarification purposes. Claims 1-21 remain pending in this application.

Claims 1-21 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Published Patent Application No. 2003/0044710 (Horikoshi et al) in view of U.S. Published Patent Application No. 2003/0049553 (Nakamura et al) and U.S. Published Patent Application No. 2004/0043318 (Sato et al) for the reasons set forth in paragraph (2) of the Office Action. Reconsideration and withdrawal of these rejections are requested for at least the following reasons.

Horikoshi et al '710 disclose a toner for flash fixing, which contains IR absorbents having absorption wavelength spectrums in a range between 800 and 2000 nm in wavelength (paragraph 0036). Horikoshi et al '710 disclose that two types of IR absorbents may be added (paragraph 0037) and the Examples and claims 5-6 show that two types of IR absorbents can be added. However, Horikoshi et al '710 nowhere disclose the properties of absorption wavelength as specified in the present claims (a maximum absorbance of the toner in a wavelength range of 810 to 870 nm is greater than the maximum absorbance of the toner in a wavelength range of 870 to 1,000 nm).

Horikoshi et al '710 discloses that two infrared absorbents having different absorption wavelength spectrum in a range between 800 and 2000 nm in wavelength are preferable for the reasons discussed in paragraphs 0037, 0054 and 0055, i.e., the use of plural infrared absorbents provides wide coverage of the absorption region. The document discloses in paragraph (0040) that two kinds of infrared absorbents which have respectively an absorption peak in the range between 800 and 1100 nm in wavelength and an absorption peak in the range between 1100 and 2000 nm in wavelength are added to the toner. The Example shown satisfies that requirement. Horikoshi et al '710 clearly does not suggest the properties of absorption wavelength as specified in the present claims.

Nakamura et al '553 disclose a toner for photofixing. Paragraph (0047) of Nakamura et al '553 discusses that it is essential to include an infrared absorber preferably having an absorption peak in the range of 700 to 1000 nm and that infrared absorbers may be used alone or two or more infrared absorbers may be used in combination. However, Nakamura et al '553 also nowhere disclose such properties of absorption wavelength as specified in the present claims (a maximum absorbance in a wavelength range of 810 to 870 nm is greater than the maximum absorbance in a wavelength range of 870 to 1,000 nm). In the Examples of Nakamura et al '553, only one infrared absorbing agent is added. Nakamura et al '553 neither discloses nor suggests the desirability of adding at least two types of infrared absorbing agents.

Sato et al '318 discloses a toner for roller-fixing. Infrared absorbing agents are neither disclosed nor suggested.

As above mentioned, none of the cited references discloses or suggests the use of at least two kinds of infrared absorbing agents to provide a toner having the absorption characteristics set forth in the present claims. Moreover, the data in the present specification

shows that superior properties are attained using a toner having a maximum absorbance in a wavelength range of 810 to 870 nm which is greater than the maximum absorbance in a wavelength range of 870 to 1,000 nm. This is clear when Examples 1-18 are compared to Comparative Examples 3-6, as shown in Table 4 on page 62. Thus, Examples 1-18 are representative of toners in accordance with the invention, i.e., containing two kinds of infrared absorbing agents and the toner having a maximum absorbance in a wavelength range of 810 to 870 nm which is greater than the maximum absorbance in a wavelength range of 870 to 1000 nm. In comparative Examples 3-6, the toners also contained two kinds of infrared absorbing agents but the toners did not have the absorption characteristics set forth in the present claims. The compositions of the Examples are shown in Tables 2 and 3 on page 55 of the specification. The results shown in Table 4 on page 62 could not have been predicted from the disclosures of the documents relied upon in the §103(a) rejection.

In view of the above, the §103 rejection should be withdrawn. Such action is earnestly solicited.

Claims 1-21 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15 and 20 of copending Application No. 10/697,236.

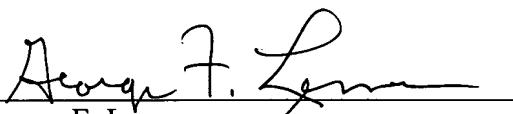
Applicants submit that the claims of the respective applications are directed to patentably distinct inventions. The present invention is characterized by the infrared absorption properties of the toner whereas the invention in Application No. 10/697,236 is characterized by a difference between the maximum peak temperature in the differential thermal curve of a first wax and the T_g of the binder resin. Mere overlap in the scope of the claims is not, per se, obvious double patenting.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at his earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: November 18, 2005

By: 
George F. Lesmes
Registration No. 19,995

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620